REMARKS

In response to the Office Action mailed April 11, 2001, Applicant respectfully requests reconsideration.

Applicant notes that the amendments to the claims have been made for clarification purposes only. The amendments made to the wording of the claims herein are specifically intended solely for clarification, and are not meant to narrow the scope of the claims.

The Office Action rejected claims 1-3 "under 35 U.S.C. 103(a) as being unpatentable over the Applicant's admitted prior art in view of Whitney (WO 95/04374, IDS)." Applicant respectfully disagrees with this rejection.

The Applicant's admitted prior art (APA) as shown in Figures 1-3 of the application, and described in the Applicant's specification, illustrates examples of dealing with the present problem according to the prior art. For example, Applicant's Figure 3 illustrates a device constructed on a substrate (1) and having a delimiting wall (2), above which are placed field plates (13), separated from the substrate (1) and other components by an insulating layer (8). The prior art figures also show a metal track (L) disposed above the device and connected to metallization (M2). Other aspects found in the prior art and depicted in the Applicant's figures and specification include stop channel ring (10) located in a region near the top of the substrate (1).

Whitney provides a device built on a substrate (21). A doped region (35) of the same conductivity type as the substrate (21) is shown disposed below field plate (31) in Figure 2 of Whitney. Field plate (31) contacts the doped region (35) and is constrained between two oxide layers (33) and (30). In Whitney, the field plate (31) extends over the grated junction termination region (27). Whitney states "field plate (31)... extends over termination (27). Specifically, portion (36) of field plate (31) extends over the entire length of junction termination (27)." Whitney at page 9, lines 34-38. Also see Whitney, Figure 2. Furthermore, Whitney shows, e.g., in Figures 2 and 3, the field plate (31, 36) extending only to one side of the device between heavily doped region (35) and the grated junction termination (27).

By contrast, the Applicant's claim 1 recites a field plate (21) which extends "lengthwise on either side of the third region in the direction of the wall and of the second region." Since neither the APA nor Whitney show a field plate extending lengthwise on either side of the

heavily doped third region towards the wall and the second region, and since the references, individually or in any combination thereof, neither teach nor suggest the use of such a field plate extending lengthwise in both directions from the heavily doped region, claim 1 distinguishes over the combination of Whitney and the APA. The Office Action makes no reference to the above-cited claim limitation in the Office Action. The Applicant thus respectfully traverses the rejection and requests that it be withdrawn.

Claims 2 and 3 depend from independent claim 1, and thus are patentably distinguished over the prior art of record for at least the same reasons discussed for claim 1 above. The Applicant respectfully requests that the rejection of claims 2 and 3 be likewise withdrawn and the claims be allowed.

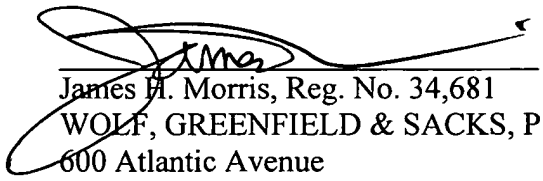
CONCLUSION

In view of the foregoing amendments and remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is requested to call the Applicant's attorney at the number listed below.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee, that is not covered by an enclosed check, please charge any deficiency to deposit account No. 23/2825.

Respectfully submitted,

Mathieu ROY



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Attorney's Docket No. S1022/8263
Dated: September 12, 2001
X(9/11/01)X

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MARKED UP CLAIMS

1. (Amended) A high voltage [component] device formed in a region of a silicon substrate of a first conductivity type delimited by a wall of [the] a second conductivity type, [having] comprising:

a lower surface [including] comprising a first region of the second conductivity type connected to the wall,

[and] an upper surface [including at least] comprising a second region of the second conductivity type,

a high voltage being likely to exist between the first and second regions and having to be withstood on the upper surface side by [the] a junction between the second region and the substrate or by [the] a junction between the wall and the substrate,

a conductive track being likely to be at a high potential extending [above] over the substrate between the second region and the wall, and

[including] a third region of the first conductivity type of high doping level formed in the substrate under a portion of the track substantially halfway between the [external periphery of the] second region and the internal periphery of the wall, [this] the third region being contacted by a field plate which is insulated from the track, and extend[ing]s widthwise at least substantially across the track [width] and lengthwise on either side of the third region in the direction of the wall and of the second region.

2. (Amended) The [component] device of claim 1, wherein the field plate extends beyond the third region in the wall direction and in the direction of the second region over a distance greater than 10 μm.

3. (Amended) The [component] device of claim 1, wherein the external periphery of the second region comprises a ring of the same conductivity type [of low] as the second region, but having a lower doping level than the second region.